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Factors that Affect Financial Sustainability of Microfinance Institution: Literature Review

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Abstract
This article presents comprehensive review of 15 articles on factors that affect microfinance financial sustainability and suggested framework for academicians and practitioners to conduct research and for open discussion.
Keyword: Microfinance, Financial Sustainability, Factors

Introduction

The financial sustainability of MFIs is a necessary condition for institutional sustainability (Hollis & Sweetman, 1998). It has been argued that unsustainable MFIs will not help the poor in the future because the MFIs will be gone (Schreiner, 2000). According to Tuhulu (2013) as cited in Nyamsogoro (2010), it is better not to have MFIs than having unsustainable ones indicating how important the sustainability of MFIs is. Financial sustainability assured, among other things, if we clearly understand determinants. But there is a literature review that provides comprehensive review on determinants of microfinance financial sustainability. There for this literature review fills this gap.

The purpose of this article is to produce a framework for the factors that affect sustainability of microfinance institutions. I provide a review of over 15 articles and the potential factors that will affect financial sustainability of MFIs. This is very important for both academicians and practitioners for conducting study by taking these factors as an initial point.

Literature review

Tehulu(2013) empirically investigated the effect of seven determinants(Breadth of outreach and deposit mobilization, management inefficiency, portfolio at risk, loans intensity, and size) on financial sustainability of microfinance Institutions in East Africa by using probit model by taking unbalanced panel data collected from 23 micro finance institutions consisting of 121 observations from the period of 2004 to 2009 and found that two variables(loans intensity and size) affect positively, two variables (management inefficiency and portfolio at risk)affect negatively, and the remaining two does not affect(Breadth of outreach and deposit mobilization) sustainability of microfinance institution in East Africa. The study concludes that while management inefficiency, portfolio at risk, loans intensity, and size are important determinants ,Breadth of outreach and deposit mobilization are not important determinants of financial sustainability of microfinance institutions in East Africa. The study keeps silent about the effect of the seventh determinants of MFI financial sustainability leverage. In addition the study concludes the importance determinants as if statistically insignificant means that they are not practically important. Finally the study suggests a comprehensive study on this topic by including credit risk and lending behavior.

By multivariate regression model called ordinary least square, Kinde (2012) tried to identify factors affecting financial sustainability of MFIs in Ethiopia by using balanced panel data set of 126 observations from 14 MFIs over the period 2002-2010 from mix market and found that microfinance breadth of outreach, depth of outreach, dependency ratio and cost per borrower affect significantly but capital structure and staff productivity has insignificant impact on financial sustainability of MFIs in Ethiopia. The study did not show clearly and kept silent about the direction of independent variable (financial sustainability) and significant dependant variables (breadth of outreach, depth of outreach, dependency ratio and cost per borrower). In addition the study suggested further study by including geographical location, growth stages, ownership, age, MFIs product deliver Methodology and dimensions of sustainability.

Rai(2012) applied multiple regression model to identify the factors that affect financial sustainability of microfinance institution by taking 8 independent variables(Capital/Assets ratio, Number of active borrowers, Yield firm, Operating expense/loan portfolio, Portfolio at risk, Women borrowers, Debt Equity ratio, Inception for firm) by taking 26 institutions out of 70 from India and 26 out of 26 from Bangladesh by simple random sampling method from mix market data for the period of 2005-06 to 2009-10 in India and Bangladesh and found that capital/ asset ratio, operating expenses/loan portfolio and portfolio at risk are the main factors which affect the sustainability of microfinance institutions. This study did not test the fitness of the model statistically. He did not suggest further study.

Adongo and Stork (2005) conducted a study on Factors Influencing the Financial Sustainability of Selected Microfinance Institutions in Namibia using Ordinary Least Squares consisting of cross-sectional data from DCD and NAMFISA as at 2004 that captured various features of selected microfinance institutions and found that microfinance institutions in Namibia were not yet financially sustainable. In addition the study found that while donor involvement and financial sustainability positively related, group lending and financial sustainability negatively related which oppose other findings, lower per capita income has not related with financial sustainability. This study did not say anything about statistical significance of the test and the fitness of the model.

Ayayi and Sene(2010) tested the effect of selected independent variables(portfolio at risk, interest rate, good management, productivity ratio, client outreach, age of microfinance)on financial sustainability of MFIs in the world by Using data on a sample of 217 MFIs with 5 diamond ratings from MIX Market database over a period of 9 years, namely from 1998 to 2006 and found the following:

- ✓ High quality credit portfolio, coupled with the application of sufficiently high interest rates that allow a reasonable profit and sound management are instrumental to the financial sustainability of MFIs.
- ✓ The percentage of women among the clientele has a weak statistically non-significant negative effect on financial sustainability of MFIs.
- ✓ The client outreach of microfinance programs and the age of MFIs have a positive but lesser impact on attainment of financial sustainability.

In this study independent variables were not indicated clearly. The study concludes that MFIs have to emulate profit-making banking practices by implementing a sound financial management and good managerial governance to assure their financial sustainability. This study did not suggest further study. The study used different dimensions (portfolio at risk, risk hedging, age of mf, number of women borrowers etc) for the independent variables but this was not clearly indicated in the study.

Sekabira(2013) conducted a study on the role of capital structure on the performance of microfinance institution by using panel data from 14 MFIs in Uganda and found that Debt and grants were negatively correlated to operational and financial sustainability. In addition he found that Grants and debt had a substantial damaging consequence on MFI performance. He concludes with MFIs must reduce dependence on debts and grants and resort to accumulating share capital for long-term financial sustainability.

Paxton (2002) examined the relationship between depth of outreach and financial sustainability 18 MFIs (in Africa and Latin America) and found strong correlation between outreach and financial sustainability in Latin America and weak correlation in Africa. The study concludes that outreach and financial sustainability are not mutually exclusive concepts.

Using financial data for socially-motivated MFIs between 2003 and 2006 in developing countries, Hisako (2009) examines the empirical relationship between competition and financial self-sufficiency (FSS). He concludes that competition has no impact on financial self-sufficiency.

Bogan (2009) investigates the effect of capital structure on financial sustainability of MFIs Africa, East Asia, Eastern Europe, Latin America, the Middle East and South Asia for the years 2003 and 2006 from mix market and found an increased use of grants by MFIs decreases their financial sustainability. The study concludes that grants could hinder the development of MFIs into competitive, efficient, sustainable operations.

CRABB(2006)looks at the relationship between the success of microfinance institutions(financial sustainability) and the degree of economic freedom in their host countries by obtaining data from the Microfinance Information Exchange (MIX) and the Heritage Foundation's Index of Economic Freedom for 511 reporting institutions out of 717 listed MFIs in 90 different countries for the period 2000 to 2004.The results show that microfinance institutions operate primarily in countries with a relatively low degree of overall economic freedom and that various economic policy factors are important to sustainability.

Kipesha and Zhang(2013) examined the presence of tradeoffs between sustainability, profitability and outreach using a panel data of 47 Microfinance institutions for four years of 2008 to 2011 from Mix market Data using unbalanced panel regression analysis model. Using Welfarists approach the study found the presence of negative tradeoffs between profitability and outreach to the poor and did not show presence of tradeoffs between financial sustainability and outreach measures. Under Institutionalist view, the study found that outreach to the poor has a positive relationship with both sustainability and profitability measures. The study concludes that, the possibility of tradeoffs exists between outreach to the poor with profitability measures as compared to the outreach with financial sustainability. The study recommends that Microfinance institutions in East Africa should focus on financial sustainability in order to reduce their subsidy dependence, ensure survival and growth in the future.

Zerai and Rani(2012) studied Tradeoff between Outreach and Sustainability of Micro finance institutions in India by using correlation matrix on 85 Indian MFIs which was obtained from the MIX MARKET and found correlation(from weak to strong) between outreach and financial sustainability. As the result study does not support a tradeoff between outreach and financial sustainability. The study concluded that they are supplementing each other.

Quayes (2012) studied the Depth of outreach and financial sustainability of microfinance institutions by utilizing data from 702 MFIs (from Mix market) operating in 83 countries and found empirical evidence that shows positive complementary relationship between financial sustainability and depth of outreach.

Sarma and Borbora(n.d) conducted a study on the financial sustainability of microfinance institutions in india by a case study of one mature MFI namely, Credit and Savings Program-Rashtriya Grameen Vikash Nidhi for the period of 2002 to 2008 and found that MFI is still financially not self-sufficient which is reflected by a number of calculated indicators.

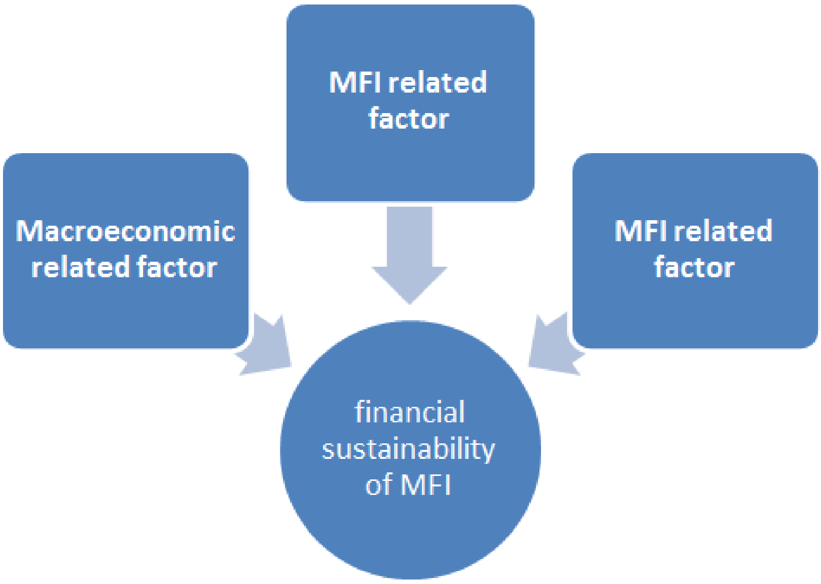
Bogan and etail(2007) examined the effect of Capital Structure on Financial Sustainability of Microfinance Institutions by using cross-section data on MFIs in Africa, East Asia, Eastern Europe, Latin America, the Middle East and South Asia by data collected from individual top 300(ranked by total assets) institutions as reported to MIX Market and found the empirical evidence fails to support interpretations of the life cycle approach that focus on MFI age as the deciding factor in sustainability but points to the importance of capital structure and funding instruments as key determinants of financial sustainability.

Summary of literature review

Author	Dependant variable	Independent variable	Direction of Effect	Country
Tehulu(2013)	financial sustainability	Breadth of outreach	No effect	East Africa
		Deposit mobilization	No effect	
		Management inefficiency	-	
		Portfolio at risk	-	
		Loans intensity	+	
		Size	+	
Kinde (2012)	financial sustainability	breadth of outreach	affect	Ethiopia
		depth of outreach	affect	
		dependency ratio	affect	
		cost per borrower	affect	
		capital structure	No effect	
		staff productivity	No effect	
Rai(2012)	financial sustainability	Capital/Assets ratio	affect	India and Bangladesh
		Number of active borrowers	No effect	
		Yield firm	No effect	
		Operating expense/loan portfolio	affect	
		Portfolio at risk	affect	
		Women borrowers	No effect	
		Debt Equity ratio	No effect	
		Inception for firm	No effect	
Adongo and Stork (2005)	Financial sustainability	Donor involvement	+	Namibia
		Group lending	-	
		Per capita income	No effect	
Ayayi and Sene(2010)	financial sustainability	portfolio at risk	Not clear	World
		interest rate	+	
		good management	+	
		productivity ratio	Not clear	
		client outreach	+	
		Women clientele	_ but not sig	
		Age of microfinance	+	
Sekabira(2013)	performance of MFI (financial sustainability)	capital structure(Debt and grants	negatively correlated	Uganda
Paxton (2002)	financial sustainability	depth of outreach	+	Latin America and Africa
Hisako (2009)	financial self-sufficiency (FSS)	competition	No effect	developing countries
Bogan (2009)	financial sustainability	capital structure	-	Africa, East Asia, Eastern Europe, Latin America, the Middle East and South Asia
CRABB(2006)	success of microfinance institutions	degree of economic freedom	+	90 different countries in the world
Kipesha and Zhang(2013)	Outreach	Welfarists – Profitability	-	East Africa
		Welfarists – financial sustainability	??	
		Institutionalist – Profitability	+	
		Institutionalist – financial sustainability	+	
Zerai and Rani(2012)	Financial sustainability	Outreach	+	India
Quayes (2012)	Financial sustainability	Depth of outreach and	+	83 countries
Sarma and Borbora(n.d)	financial sustainability of microfinance institutions		Not sustainable	India
Bogan and etail(2007)	Financial Sustainability	Capital Structure	+	Africa, East Asia, Eastern Europe, Latin America, the Middle East and South Asia
		MFI age	not	
		funding instruments	+	

Proposed framework

After reviewing relevant literature I developed the following comprehensive framework which gives possible potential factors that affect financial sustainability of micro finance institutions.



MFI related factor			Borrower related factor	Macroeconomic related variable
Breadth of outreach	Staff productivity	Age of microfinance	Cost per borrower	Per capita income
Depth of outreach	Portfolio at risk	Capital structure	Number of active borrowers	Interest rate
Deposit mobilization	Loans intensity	Yield	Women borrowers	Competition
Management efficiency	Size	Operating expense/loan portfolio	Group lending	Degree of economic freedom

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